

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1-16. (Cancelled).

1 17. (Currently Amended) A method of wireless communication, comprising:
2 transmitting a message to one or more wireless units, said message including (i) a first
3 control data that causes said one or more wireless units to enable request to send (RTS) and
4 clear to send (RTS/CTS) data transmissions in transmitting data packets to an access point,
5 and (ii) a second control data that causes said one or more wireless units to automatically
6 adjust a fragmentation threshold in response to changes within the wireless transmission
7 medium based on a finite time duration for data packet transmission taking in account a size
8 of each data packet and a data rate for transmission of each data packet independent of
9 whether or not RTS/CTS data transmissions are used; and
10 measuring a transmission error factor and adjusting the fragmentation threshold in
11 accordance with said measured transmission error factor.

1 18. (Original) The method of claim 17, wherein said message comprises a
2 multicast data packet intended for said one or more associated wireless units.

1 19. (Previously Presented) The method of claim 17, wherein said second control
2 data of said message includes a current fragmentation threshold being determined by the
3 access point (i) comparing the transmission error factor to an upper threshold and reducing a
4 prior fragmentation threshold to the current fragmentation threshold if the transmission error
5 factor is greater than the upper threshold and (ii) comparing the transmission error factor to a
6 lower threshold and increasing the prior fragmentation threshold to the current fragmentation
7 threshold if the transmission error factor is less than the lower threshold.

1 20. (Previously Presented) The method of claim 19, wherein the current
2 fragmentation threshold is determined by dividing a maximum fragmentation threshold by a
3 divisional factor, the divisional factor is decremented when the transmission error factor is
4 greater than the upper threshold, is incremented when the transmission error factor is less

5 than the lower threshold and remains constant when the transmission error factor is less than
6 the upper threshold and greater than the lower threshold.

1 21. (Currently Amended) An access point having a logic circuit to transmit a
2 message to one or more associated wireless unit, wherein said message includes (i) a first
3 control data that causes said one or more associated wireless units to enable request to send
4 (RTS) and clear to send (RTS/CTS) data transmissions in transmitting at least one data
5 packets to said access point, and (ii) a second control data that causes said one or more
6 associated wireless units to automatically adjust a fragmentation threshold in response to
7 changes within the wireless transmission medium based on a finite time duration for data
8 packet transmission taking in account a size of said data packet and a data rate for
9 transmission of said data packet independent of whether or not RTS/CTS data transmissions
10 are used, said logic circuit being operable to continue to adjust the fragmentation threshold
11 through subsequent messages based on a measured transmission error factor.

1 22. (Original) The access point of claim 21, wherein said message comprises a
2 multicast data packet intended for said one or more associated wireless units.

1 23. (Currently Amended) The access point of claim 21, wherein said message
2 further includes said second control data includes a current fragmentation threshold being
3 determined by the access point (i) comparing the transmission error factor to a lower an upper
4 threshold and reducing a prior fragmentation threshold to the current fragmentation threshold
5 if the transmission error factor is greater than the upper threshold and (ii) increasing the finite
6 time duration by increasing the fragmentation threshold if the transmission error factor is
7 below the lower threshold comparing the transmission error factor to a lower threshold and
8 increasing the prior fragmentation threshold to the current fragmentation threshold if the
9 transmission error factor is less than the lower threshold.

1 24. (Currently Amended) The access point of claim 2321, wherein the current
2 fragmentation threshold is automatically adjusted by (i) comparing the transmission error
3 factor to an upper threshold, (ii) decreasing the finite time duration by decreasing the
4 fragmentation threshold if the transmission error factor is above the upper threshold, (iii)
5 comparing the transmission error factor to a lower threshold, and (iv) increasing the finite
6 time duration by increasing the fragmentation threshold if the transmission error factor is

7 ~~below the lower threshold determined by dividing a maximum fragmentation threshold by a~~
8 ~~divisional factor, the divisional factor is decremented when the transmission error factor is~~
9 ~~greater than the upper threshold, is incremented when the transmission error factor is less~~
10 ~~than the lower threshold and remains constant when the transmission error factor is less than~~
11 ~~the upper threshold and greater than the lower threshold.~~

1 25. (Currently Amended) A machine readable medium including a software
2 routine to control a logic circuit to transmit a message to one or more associated wireless
3 unit, wherein said message includes (i) a first control data that causes said logic circuit to
4 enable request to send (RTS) and clear to send (RTS/CTS) data transmissions in transmitting
5 data packets to said access point, and (ii) a second control data that causes said one or more
6 associated wireless units to automatically adjust a fragmentation threshold in response to
7 changes within the wireless transmission medium based on a finite time duration for a
8 transmission of one of said data packets taking in account a size of said one of said data
9 packets and a data rate for transmission of said one of said data packets independent of
10 whether or not RTS/CTS data transmissions are used and continue to adjust the fragmentation
11 threshold based on a measured transmission error factor and to continue to adjust the
12 fragmentation threshold based on a measured transmission error factor.

1 26. (Original) The machine readable medium of claim 25, wherein said message
2 comprises a multicast data packet intended for said one or more associated wireless units.

1 27. (Currently Amended) The machine readable medium of claim 25, wherein
2 said second control data of said message includes a current fragmentation threshold being
3 determined by the access point (i) comparing the transmission error factor to an upper
4 threshold, (ii) decreasing the finite time duration by decreasing the fragmentation threshold if
5 the transmission error factor is above the upper threshold, (iii) comparing the transmission
6 error factor to a lower threshold, and (iv) increasing the finite time duration by increasing the
7 fragmentation threshold if the transmission error factor is below the lower threshold(i)
8 comparing the transmission error factor to an upper threshold and reducing a prior
9 fragmentation threshold to the current fragmentation threshold if the transmission error factor
10 is greater than the upper threshold and (ii) comparing the transmission error factor to a lower
11 threshold and increasing the prior fragmentation threshold to the current fragmentation
12 threshold if the transmission error factor is less than the lower threshold.

1 28. (Currently Amended) The machine readable medium of claim 27, wherein
2 said second control data of said message includes a the-current fragmentation threshold is
3 being determined by dividing a maximum fragmentation threshold by a divisional factor, the
4 divisional factor is decremented when the transmission error factor is greater than the upper
5 threshold, is incremented when the transmission error factor is less than the lower threshold
6 and remains constant when the transmission error factor is less than the upper threshold and
7 greater than the lower threshold.

1 29. (Currently Amended) A wireless unit, comprising:
2 a wireless transceiver to communicate with an access point via a wireless
3 transmission medium; and
4 a logic circuit to receive a message from said access point by way of said wireless
5 transceiver, wherein said message includes (i) a first control data that causes a request to send
6 (RTS) and clear to send (RTS/CTS) transmission of data to said access point, and (ii) a
7 second control data that causes automatic adjustment of a fragmentation threshold supported
8 by said wireless unit in response to changes within the wireless transmission medium based
9 on a finite time duration for transmission of a data packet taking into account a size of said
10 data packet and a rate for transmission of said data packet and independent of whether or not
11 RTS/CTS data transmissions are used, said logic circuit to continue to adjust said
12 fragmentation threshold through subsequent messages based on a measured transmission
13 error factor.

1 30. (Original) The wireless unit of claim 29, wherein said message comprises a
2 multicast data packet.

1 31. (Currently Amended) The wireless unit of claim 29, wherein said second
2 control data of said message includes a current fragmentation threshold being determined by
3 after said access point (i) compares said transmission error factor to an upper threshold and
4 reduces a prior fragmentation threshold to the current fragmentation threshold if the
5 transmission error factor is greater than the upper threshold and (ii) compares the
6 transmission error factor to a lower threshold and increases the prior fragmentation threshold

7 to the current fragmentation threshold if the transmission error factor is less than the lower
8 threshold.

1 32. (Previously Presented) The wireless unit of claim 29, wherein said second
2 control data including a reduced fragmentation threshold provided in real-time in response to
3 a change in the wireless transmission medium due to an increase in RF interference.

1 33-40. (Cancelled).

1 41. (Currently Amended) An access point having a logic circuit to transmit a
2 message to one or more associated wireless unit, said message includes a first control data
3 that causes said one or more associated wireless units to adjust a fragmentation threshold in
4 transmitting data packets to said access point and a second control data that causes said one
5 or more wireless units to use request to send (RTS) and clear to send (CTS) in the
6 transmission of data to said access point, said logic circuit to adjust of the fragmentation
7 threshold based on a time duration for transmission of said message taking into account a size
8 of said message and a rate for transmission of said message being independent of whether or
9 not the RTS and CTS are used in the data transmissions and to continue to adjust the
10 fragmentation threshold through subsequent messages based on a measured transmission
11 error factor.

1 42. (Previously Presented) The access point of claim 41, wherein said message is
2 a multicast data packet intended for said one or more wireless units.

1 43. (Previously Presented) The access point of claim 41, wherein said message
2 further includes a specified fragmentation threshold to be used by said one or more wireless
3 units.

1 44. (Currently Amended) A machine readable medium including a software
2 routine executed to control a logic circuit to transmit a message to one or more associated
3 wireless unit, said message includes (i) a first control data that causes said one or more
4 associated wireless units to use request to send (RTS) and clear to send (CTS) in the
5 transmission of data to an access point, and (ii) a second control data that causes automatic
6 adjustment of a fragmentation threshold supported by said wireless unit in response to

7 changes within the wireless transmission medium based on a finite time duration for a
8 transmission of a data packet taking in account a size of said data packet and a data rate for
9 transmission of said data packet and independent of whether or not RTS/CTS data
10 ~~transmissions are used~~, said logic circuit to continue to adjust said fragmentation threshold
11 through subsequent messages based on a measured transmission error factor.

1 45. (Previously Presented) The machine readable medium of claim 44, wherein
2 said message further includes a second control data that causes said one or more associated
3 wireless units to implement fragmentation threshold in transmitting data packets to said
4 access point.

1 46. (Previously Presented) The machine readable medium of claim 45, wherein
2 said message further includes a specified fragmentation threshold to be used by said one or
3 more associated wireless units.